Appl. No.: 09/828,564

Amdt. dated February 5, 2006

Reply to Office Action of December 6, 2006

Remarks/Arguments

Claims 1-6 and 8-46 remain in the application. The Examiner has acknowledged that

claims 8-10 and 12-38 are directed to allowable subject matter. Claim 46 has been objected to

and would be allowable if rewritten in independent form including all the limitations of the base

claim and any intervening claims. Claims 4-6 remain withdrawn from consideration by the Ex-

claim and any intervening claims. Claims 4-0 remain windrawn from consideration by the Ex-

aminer.

Claim 46 is amended to incorporate the limitations of claim 45 to overcome the Exam-

iner's objection, and as such, claim 46 is in condition for allowance.

Claim Rejections - 35 USC § 103 - DiGiacomo in view of Anderson

The Examiner rejected claims 1-3, 11, and 39-45 under 35 U.S.C. 103(a) as being obvi-

ous with respect to DiGiacomo et al., US Patent No. 6,085,831 ("DiGiacomo") in view of Ander-

son et al. US Patent No. 5,761,037 ("Anderson"). The Examiner recited each element of each

claim and indicated that each element was disclosed in DiGiacomo. In order to anticipate a

claim, the reference must disclose all elements of the claim.

As amended, claims 1 and 43 both provide a thermosyphon that includes an evaporator

that is substantially full at all orientations. As noted by the Examiner, DiGiacomo does not dis-

close such a feature. Nor is the recited combination of elements obvious based on DiGiacomo in

view of Anderson. Applicants respectfully submit that, contrary to the Examiner's position,

Anderson does not disclose an evaporator that is substantially full of liquid coolant at all orienta-

tions. Rather, Anderson discloses an evaporator that is orientation independent as the result of

having a wicking member that purportedly causes an evaporator to function when the evaporator

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is less than full. For example, Anderson states that the "shape [of the wick manifold 102] en-

sures that regardless of the orientation of the evaporator, working fluid is still delivered to heated

surface 104" See Anderson at coll. 4, lines 33-35. If the evaporator of Anderson were al-

ways substantially full, a wicking device that ensures delivery of fluid to the heated surface

would not be required, as the fluid would always be in contact with the heated surface. Also, the

maximum heat load capability of the device would not be limited to the "capillary limit" at which

a wick dryout would occur. The wicking of Anderson is only necessary because at some orienta-

tions, if not all, the evaporator is not assured to be substantially full of fluid. Accordingly, no

reference teaches or suggests a thermosyphon that includes an evaporator that is substantially full

at any orientation, and there is no prima facie case of obviousness.

Amended claim 39 recites a symmetrical geometry of the evaporator and condenser about

a central plane that is neither taught nor suggested by either cited reference. Claims 39, 41, and

45 all recite a thermosyphon including an evaporator that is kept substantially full at all orienta-

tions, also neither taught nor suggested by either cited reference, and accordingly is allowable for

the same reasons as claims 1 and 43. Thus, claims 39, 41, and 45 are nonobvious and allowable,

as again there is no prima facie case of obviousness.

With respect to claims 2, 3, and 11, such claims depend directly or indirectly from allow-

able independent claim 1, including all of the limitations therein, and are therefore also allowable

for the same reasons discussed above. In addition, because claim 1 is allowable, previously

withdrawn claims 4-6, which depend directly or indirectly from claim 1 and include all the limi-

tations thereof, are allowable. With respect to claims 40, 42, and 44, such claims depend directly

from allowable independent claims 39, 41, and 43 respectively, including all of the limitations

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therein, and are therefore also allowable for the same reasons discussed above. Furthermore, all

of such dependent claims recite unique combinations of elements not disclosed or suggested by

DiGiacomo or Anderson.

Allowable Subject Matter

The Applicants appreciate the Examiner's acknowledgement of claims 8-10 and 12-38 as

including allowable subject matter and claim 46 as being allowable if rewritten in independent

form including all of the limitations of the base claim and any intervening claims.

As the rejections entered by the Examiner in the Official Action dated December 6, 2006

have been shown to be inapplicable, reconsideration and allowance of all claims that have not

been canceled, and passage of these claims to issue, is hereby respectfully requested.

If the Examiner has any questions about the present Reply, a telephone interview is re-

spectfully requested.

Respectfully submitted,

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